

=> file medline hcaplus embase biosis

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SESSION

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FILE 'MEDLINE' ENTERED AT 16:45:55 ON 24 JUN 2004

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FILE 'BIOSIS' ENTERED AT 16:45:55 ON 24 JUN 2004

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=> s point mutation and dityrosine cross-linking

L1 0 POINT MUTATION AND DITYROSINE CROSS-LINKING

=> s point mutation and dityrosine crosslinking

L2 0 POINT MUTATION AND DITYROSINE CROSSLINKING

=> s point mutation and dityrosine

L3 1 POINT MUTATION AND DITYROSINE

=> d l3

L3 ANSWER 1 OF 1 MEDLINE on STN

AN 2003145975 MEDLINE

DN PubMed ID: 12661766

TI Enhanced oligomerization of the alpha-synuclein mutant by the  
Cu,Zn-superoxide dismutase and hydrogen peroxide system.

AU Kang Jung Hoon; Kim Kyung Sik

CS Department of Genetic Engineering, Chongju University, Chongju 360-764,  
Korea.. jhkang@chongju.ac.kr

SO Molecules and cells, (2003 Feb 28) 15 (1) 87-93.

Journal code: 9610936. ISSN: 1016-8478.

CY KOREA (SOUTH)

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200305

ED Entered STN: 20030331

Last Updated on STN: 20030502

Entered Medline: 20030501

=> s point mutation and cross-linking

L4 390 POINT MUTATION AND CROSS-LINKING

=> dup rem l4

PROCESSING COMPLETED FOR L4

L5 298 DUP REM L4 (92 DUPLICATES REMOVED)

=> s l5 and dityrosine

L6 0 L5 AND DITYROSINE

=> s l5 and tyrosine

L7 34 L5 AND TYROSINE

=> s l5 and tyrosyl-tyrosyl

L8 0 L5 AND TYROSYL-TYROSYL

=> d 17 1-10

L7 ANSWER 1 OF 34 MEDLINE on STN  
AN 2003111851 MEDLINE  
DN PubMed ID: 12591901  
TI A role of suppressor of cytokine signaling 3 (SOCS3/CIS3/SSI3) in  
CD28-mediated interleukin 2 production.  
AU Matsumoto Akira; Seki Yoh-ichi; Watanabe Ryosuke; Hayashi Katsuhiko;  
Johnston James A; Harada Yohsuke; Abe Ryo; Yoshimura Akihiko; Kubo Masato  
CS Research Institute for Biological Sciences, Tokyo University of Science,  
Chiba 278-0022, Japan.  
SO Journal of experimental medicine, (2003 Feb 17) 197 (4) 425-36.  
Journal code: 2985109R. ISSN: 0022-1007.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200303  
ED Entered STN: 20030311  
Last Updated on STN: 20030321  
Entered Medline: 20030320

L7 ANSWER 2 OF 34 MEDLINE on STN  
AN 2002192409 MEDLINE  
DN PubMed ID: 11815609  
TI Structural basis for binding multiple ligands by the common cytokine  
receptor gamma-chain.  
AU Olosz Ferenc; Malek Thomas R  
CS Department of Microbiology and Immunology, University of Miami School of  
Medicine, Miami, Florida 33101, USA.  
NC AI401114 (NIAID)  
SO Journal of biological chemistry, (2002 Apr 5) 277 (14) 12047-52.  
Journal code: 2985121R. ISSN: 0021-9258.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200205  
ED Entered STN: 20020403  
Last Updated on STN: 20030105  
Entered Medline: 20020513

L7 ANSWER 3 OF 34 MEDLINE on STN  
AN 2002062921 MEDLINE  
DN PubMed ID: 11698401  
TI Conformational changes that occur during M3 muscarinic acetylcholine  
receptor activation probed by the use of an in situ disulfide  
**cross-linking** strategy.  
AU Ward Stuart D C; Hamdan Fadi F; Bloodworth Lanh M; Wess Jurgen  
CS Laboratory of Bioorganic Chemistry, NIDDK, National Institutes of Health,  
Bethesda, Maryland 20892, USA.  
SO Journal of biological chemistry, (2002 Jan 18) 277 (3) 2247-57.  
Journal code: 2985121R. ISSN: 0021-9258.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200202  
ED Entered STN: 20020125  
Last Updated on STN: 20030105  
Entered Medline: 20020213

L7 ANSWER 4 OF 34 MEDLINE on STN  
AN 2001525611 MEDLINE  
DN PubMed ID: 11573249

TI Utilization of a receptor reserve for effective amplification of mitogenic signaling by an epidermal growth factor mutant deficient in receptor activation.  
 AU Nandagopal K; Popp D M; Niyogi S K  
 CS The University of Tennessee-Oak Ridge Graduate School of Genome Science and Technology and Life Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831-8080, USA.  
 SO Journal of cellular biochemistry, (2001 Aug 1-9) 83 (2) 326-41.  
 Journal code: 8205768. ISSN: 0730-2312.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200112  
 ED Entered STN: 20010927  
 Last Updated on STN: 20020122  
 Entered Medline: 20011207

L7 ANSWER 5 OF 34 MEDLINE on STN  
 AN 2001296615 MEDLINE  
 DN PubMed ID: 11376005  
 TI Dynamic recruitment of human CD2 into lipid rafts. Linkage to T cell signal transduction.  
 AU Yang H; Reinherz E L  
 CS Laboratory of Immunobiology, Dana-Farber Cancer Institute and the Department of Medicine, Harvard Medical School, Boston, Massachusetts 02115, USA.  
 NC AI21226 (NIAID)  
 SO Journal of biological chemistry, (2001 Jun 1) 276 (22) 18775-85.  
 Journal code: 2985121R. ISSN: 0021-9258.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200107  
 ED Entered STN: 20010730  
 Last Updated on STN: 20030105  
 Entered Medline: 20010726

L7 ANSWER 6 OF 34 MEDLINE on STN  
 AN 1999384077 MEDLINE  
 DN PubMed ID: 10452997  
 TI Requirement for Shc in TCR-mediated activation of a T cell hybridoma.  
 AU Pratt J C; van den Brink M R; Igras V E; Walk S F; Ravichandran K S; Burakoff S J  
 CS Division of Pediatric Oncology, Dana-Farber Cancer Institute, Department of Pediatrics, Harvard Medical School, Boston, MA 02115, USA.  
 NC CA70758 (NCI)  
 SO Journal of immunology (Baltimore, Md. : 1950), (1999 Sep 1) 163 (5) 2586-91.  
 Journal code: 2985117R. ISSN: 0022-1767.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Abridged Index Medicus Journals; Priority Journals  
 EM 199909  
 ED Entered STN: 19990925  
 Last Updated on STN: 19990925  
 Entered Medline: 19990914

L7 ANSWER 7 OF 34 MEDLINE on STN  
 AN 1999182478 MEDLINE  
 DN PubMed ID: 10082557  
 TI CD5 negatively regulates the T-cell antigen receptor signal transduction pathway: involvement of SH2-containing phosphotyrosine phosphatase SHP-1.

AU Perez-Villar J J; Whitney G S; Bowen M A; Hewgill D H; Aruffo A A; Kanner S B  
 CS Immunology and Inflammation Drug Discovery, Bristol-Myers Squibb  
 Pharmaceutical Research Institute, Princeton, New Jersey 08543, USA..  
 perezvj@bms.com  
 SO Molecular and cellular biology, (1999 Apr) 19 (4) 2903-12.  
 Journal code: 8109087. ISSN: 0270-7306.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199904  
 ED Entered STN: 19990504  
 Last Updated on STN: 19990504  
 Entered Medline: 19990420

L7 ANSWER 8 OF 34 MEDLINE on STN  
 AN 1998190014 MEDLINE  
 DN PubMed ID: 9521759  
 TI Determining protein-protein interactions by oxidative **cross-linking** of a glycine-glycine-histidine fusion protein.  
 AU Brown K C; Yu Z; Burlingame A L; Craik C S  
 CS Department of Pharmaceutical Chemistry, University of California at San Francisco, San Francisco, California 94131, USA.  
 NC CA 72006 (NCI)  
 NCRR 01614 (NCRR)  
 SO Biochemistry, (1998 Mar 31) 37 (13) 4397-406.  
 Journal code: 0370623. ISSN: 0006-2960.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199804  
 ED Entered STN: 19980430  
 Last Updated on STN: 19980430  
 Entered Medline: 19980423

L7 ANSWER 9 OF 34 MEDLINE on STN  
 AN 1998056808 MEDLINE  
 DN PubMed ID: 9394826  
 TI Analysis of the **tyrosine** phosphorylation and calcium fluxing of human CD6 isoforms with different cytoplasmatic domains.  
 AU Kobarg J; Whitney G S; Palmer D; Aruffo A; Bowen M A  
 CS Bristol-Myers Squibb Pharmaceutical Research Institute, Seattle, USA..  
 Jorg-Kobarg@ccmail.bms.com  
 SO European journal of immunology, (1997 Nov) 27 (11) 2971-80.  
 Journal code: 1273201. ISSN: 0014-2980.  
 CY GERMANY: Germany, Federal Republic of  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199801  
 ED Entered STN: 19980122  
 Last Updated on STN: 19980122  
 Entered Medline: 19980102

L7 ANSWER 10 OF 34 MEDLINE on STN  
 AN 97460142 MEDLINE  
 DN PubMed ID: 9312162  
 TI Lck phosphorylates the activation loop **tyrosine** of the Itk kinase domain and activates Itk kinase activity.  
 AU Heyeck S D; Wilcox H M; Bunnell S C; Berg L J  
 CS Department of Molecular and Cellular Biology, Harvard University, Cambridge, Massachusetts 02138, USA.  
 NC AI37584 (NIAID)

SO Journal of biological chemistry, (1997 Oct 3) 272 (40) 25401-8.  
Journal code: 2985121R. ISSN: 0021-9258.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199710  
ED Entered STN: 19971105  
Last Updated on STN: 20000303  
Entered Medline: 19971022

=> s tyrosyl-tyrosyl and mutation  
L9 2 TYROSYL-TYROSYL AND MUTATION

=> dup rem l9  
PROCESSING COMPLETED FOR L9  
L10 2 DUP REM L9 (0 DUPLICATES REMOVED)

=> d l10 1-2 ibib ab

L10 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:392180 HCAPLUS  
DOCUMENT NUMBER: 136:382547  
TITLE: Stabilization of proteins and enzymes by  
**tyrosyl-tyrosyl** crosslinking  
INVENTOR(S): Marshall, Christopher P.; Hoffman, Alexander; Errico,  
Joseph P.; Marshall, Paul B.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 79 pp., Cont.-in-part of Appl.  
No. PCT/US00/28595.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| US 2002061549 | A1   | 20020523 | US 2001-837235  | 20010418 |
| WO 2001029247 | A1   | 20010426 | WO 2000-US28595 | 20001016 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-159763P P 19991015  
WO 2000-US28595 A2 20001016

AB The invention concerns methods for stabilizing polypeptides and polypeptide complexes, and the polypeptides and polypeptide complexes stabilized using the methods. To achieve stabilization, a cross-link reaction is controlled such that polypeptides and polypeptide complexes maintain their original functionality. In one embodiment, the invention provides a method for the identification of amino acid residues which, when cross-linked, are least disruptive to the structure and function of the polypeptide or polypeptide complex. In another embodiment, the invention provides a method for mutagenesis of identified residues to further control the cross-link reaction. Polypeptides and polypeptide complexes so stabilized can be utilized under a wide variety of physiol. and non-physiol. conditions. Further, the cross-link methodol. disclosed herein may preclude the need for addn. of exogenous structures to

engineered proteins and complexes, such as peptide linkers that could be immunogenic and/or significantly decrease efficacy. In another embodiment, the invention provides a method for statistical anal. of databases of structural and/or sequence information available for polypeptides and polypeptide complexes to be stabilized. The statistical anal. identifies suitable residue pairs which are least likely to be disruptive of structure and function when cross-linked. Further, in a polypeptide chain or chains to be cross-linked, potentially undesirable reactive side-chains may be masked and protected, or altered using site-directed mutagenesis, e.g., to introduce a maximally conservative point **mutation** that will not support the cross-link reaction. The cross-link reaction conditions may also be adjusted to prevent undesired cross-links or other undesired side-effects. At residues identified as desirable positions for crosslinking, reactive side-chains may be introduced by site-directed mutagenesis, and the cross-link reaction is carried out using the conditions identified above.

L10 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:300896 HCAPLUS

DOCUMENT NUMBER: 134:323140

TITLE: Stabilization of proteins and enzymes by **tyrosyl-tyrosyl** crosslinking

INVENTOR(S): Marshall, Christopher P.; Hoffman, Alexander; Errico, Joseph P.; Marshall, Paul B.

PATENT ASSIGNEE(S): Avatar Medical, LLC, USA

SOURCE: PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE       |
|--|------|----------|-----------------|------------|
| WO 2001029247  | A1   | 20010426 | WO 2000-US28595 | 20001016   |
| W:   |      |          |                 |            |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |            |
| RW:  |      |          |                 |            |
| GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG   |      |          |                 |            |
| EP 1282722   | A1   | 20030212 | EP 2000-973574  | 20001016   |
| R:   |      |          |                 |            |
| AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL   |      |          |                 |            |
| US 2002061549  | A1   | 20020523 | US 2001-837235  | 20010418   |
| PRIORITY APPLN. INFO.:   |      |          | US 1999-159763P | P 19991015 |
|  |      |          | WO 2000-US28595 | W 20001016 |

AB The invention described herein comprises methods for stabilizing polypeptides and polypeptide complexes by the introduction of intra-polypeptide and/or inter-polypeptide **tyrosyl-tyrosyl** bonds. The stabilization methods include controlled oxidative cross-link reaction such that polypeptides and polypeptide complexes maintain their original functionality. Embodiments of the invention outlining methods for identification of amino acid residues which when cross-linked are least disruptive to the structure and function of the polypeptides or polypeptide complex; as well as methods for mutagenesis for identifying residues to further control the cross-link reaction; and statistical anal. of the data base for the identification suitable residue pairs which are least likely to be disruptive of structure and function when cross-linked. Detailed cross-linked procedures and reaction conditions are exemplified and discussed.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

19.01

19.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-1.39

-1.39

STN INTERNATIONAL LOGOFF AT 16:51:57 ON 24 JUN 2004